

**REMARKS**

Applicants thank the Examiner for total consideration given the present application. Claims 1-20 are currently pending of which claims 8-20 are withdrawn as being directed to non-elected species. Claim 1 has been amended. Applicants respectfully request reconsideration of the rejected claims in light of the amendment and remarks presented herein, and earnestly seek timely allowance of all pending claims.

**35 U.S.C. § 102 REJECTION – Vetrovec**

The Examiner rejects claims 1-5 under 35 U.S.C. § 102(e) as allegedly being anticipated by Vetrovec (U.S. Patent No. 7,085,304)[hereinafter “Vetrovec”].

The Examiner further rejects claims 1 and 6 under 35 U.S.C. § 102(b) as allegedly being anticipated by Brauch (U.S. Patent No. 5,553,088)[hereinafter “Brauch”]. Applicants respectfully traverse these rejections.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02.* Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, neither Vetrovec nor Brauch teaches or suggests each and every claimed element. For example, independent claim 1 recites, *inter alia*, “wherein said laser light is beam shaped having a diameter c and the solid state laser medium is constructed such that a constant ratio between the beam diameter c of the laser light and the size of the solid state laser medium in both directions is maintained.” *Emphasis added.*

It is respectfully submitted that Vetrovec fails to teach or suggest the above-identified claim feature.

As previously submitted, Vetrovec merely discloses a conventional amplifier module for amplifying a source light in a solid state laser. The amplifier module includes a disk 12 having a

diameter of about 10-300 mm ( $D_o$ ). The disk 12 also includes two substantially parallel surfaces 22, 24 and an optical laser gain material 26 having a diameter ( $D_L$ ). The optical laser gain material is capable of amplifying a laser beam 64 in response to an optical pump radiation 36. Laser gain material 26 may be implemented with suitable optical material having a host lattice doped with suitable ions capable of being pumped to laser transition. When the laser beam 64 has an angle of incidence with disk 12 that is approximately normal, the perimeter of gain medium 26 may be circular or nearly circular to provide good mode fill. However, when the laser beam 64 has an angle of incidence that is significantly off of the normal, the perimeter of gain medium 26 may be more elliptical in shape. (See col. 6, lines 4-25.)

Vetrovec is distinguished from the claimed invention in that nowhere does Vetrovec teach or suggest the relationship between the laser beam 64 and the size of the disk 12 or the optical laser gain material 26. Particularly, Vetrovec fails to teach that the disk 12 or the optical laser gain material 26 is constructed such that a constant ratio between a diameter of the laser beam 64 and the size of the disk 12 or the optical laser gain material 26.

Therefore, for at least these reasons, independent claim 1 is distinguishable from Vetrovec. Claims 2-5 depend from claim 1, directly or indirectly. Therefore, for at least the reasons stated with respect to claim 1, claims 2-5 are also distinguishable from Vetrovec.

Accordingly, Applicant respectfully requests that the rejection of claims 1-5, based on Vetrovec, be withdrawn.

35 U.S.C. § 103 REJECTION – Vetrovec, Brauch

Claims 1, 6, and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Brauch. Claims 6 and 7 depends from claim 1. As demonstrated above, Vetrovec fails to teach or suggest “wherein said laser light is beam shaped having a diameter c and the solid state laser medium is constructed such that a constant ratio between the beam diameter c of the laser light and the size of the solid state laser medium in both directions is maintained” as recited in claim 1. Brauch has not been, and indeed cannot be relied upon to

fulfill at least the above-identified deficiency of Vetrovec. Therefore, for at least the reasons stated with respect to claim 1, claims 6-7 are also distinguishable from the combined invention of Vetrovec and Brauch.

**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: November 24, 2008

Respectfully submitted,

By  # 58,755  
D. Richard Anderson  
Registration No.: 40,439  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant